The Spotter's Page

Volume 4, Issue 2 SPRING 1999 / SUMMER 1999

AWIPS – The Final Piece of the Modernization Puzzle

The final technological piece in the decade-long NWS Modernization arrived at WFO Wakefield in early March. AWIPS (Automated Weather Interactive Processing System) is a network of interactive graphical and text workstations that allow forecasters to more efficiently display and assimilate the myriad of weather data available to them in the forecast preparation process. WFO Wakefield has 5 sets of workstations, each containing 2 graphical displays and 1 text display. Data from airports, marine buoys, weather balloons, satellites, radar, and computer forecast models can all be displayed, separately or simultaneously on these workstations. These displays are customizable by individual forecasters to suit their needs and preferences.

One important role AWIPS will play is in the issuance of severe thunderstorm, tornado and special marine warnings. AWIPS, through a software program called WARNGEN, allows forecasters to graphically determine the area to be warned. It then composes the warning using pre-defined templates. Some aspects of WARNGEN are already being utilized by AKQ forecasters. However, much localization and customization is still needed to make the program fully operational for our area of responsibility.

Eventually, forecasters will generate both text AND graphical forecasts of temperatures, precipitation,

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Figure 1: Keith Lynch, Service Hydrologist, is using the AWIPS computer system to evaluate the weather pattern.

Hurricane Safety: What to do When nature threatens!

For people living near the Atlantic Coast or Chesapeake Bay, June 1st, the first day of hurricane season, is a significant date. Though the threat of a strong hurricane direct impacting the Virginia, Maryland or northern North Carolina Shores is less than in Florida, people along the mid-Atlantic coast should still be prepared. Residents should begin their preparations well in advance of the issuance of a hurricane or tropical storm watch or warning. The following guidelines and suggestions are for anyone who could potentially be in the path of mother nature's fury, to become better prepared for a hurricane.

STEP 1, decide upon an evacuation plan for you and your family. Determine in advance where you will go in the event a hurricane evacuate is ordered in your area. Choose several places, such as homes of family, or hotels in 2 or 3 locations well inland. Keep handy the telephone numbers for these places, as well as road maps of the local areas. You may need to evacuate quickly and/or to take alternate or unfamiliar routes.

In the event that you do not need to evacuate, you should assemble a Hurricane Supply Kit. This kit

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Inside This Issue

Drought: How dry does it need to be?

By Bill Sammler, WCM

Anyone with a lawn, flower or vegetable garden was obviously affected by the lack of rainfall across the region, since late April. Has this dry spell placed us into a drought situation?

The official definition of a drought is divided into six types. They are: 1) Meteorological drought - involves precipitation deficiencies in absolute amounts; 2) Climatological drought - precipitation deficiencies related to normal values; 3) Atmospheric drought - defined in terms of precipitation, as well as temperature, humidity, and/or wind speed; 4) Agricultural drought - involves soil moisture and effects on crops; 5) Hydrologic drought - determined by the reduction of streamflows and lake levels, as well as the lowering of ground water tables; and 6) Water management drought – assesses problems that may exist because of deficiencies in water management practices or facilities.

At the start of this summer, much attention was focused on dry conditions that have occurred across the mid-Atlantic regions since May 1998. The period of June 1998 to June 1999 was the second driest in the 103 year monitoring history, and has produced heightened concerns from several state, local and federal agencies. Over the past year, Virginia, Maryland, and northeast North Carolina have experienced some degree of an official drought.

Forecasters use various tools to evaluate a drought or potential drought situation. We closely watch the long term precipitation totals across a given area, the global weather patterns, and daily temperatures. By analyzing the global weather patterns we can assess how long a dry weather period might last. One pattern we watch for, which occurred during the last part of June and into July, is a ridge of high pressure, developing in the upper layers of the atmosphere, across the Eastern US and the Western Atlantic Ocean. This pattern can produce a dry weather regime across the Mid Atlantic States. Also, over a prolonged period of hot weather, the dry conditions will be enhanced because the evapo-transporation from plants (the process of plants "giving off moisture to the surrounding air"), is decreased.

Forecasters also have parameters such as the Palmer Index or the Keetch-Byram Drought Index to assess moisture levels. The Palmer Index denotes prolonged and abnormal moisture deficiencies. It indicates general, long-term conditions, and will not be influenced by isolated areas of rainfall. This index was developed using temperature and precipitation information. It takes into account local climate factors such as the departure from normal moisture values. The incorporation of local climate factors allows the index to be utilized nationwide. For example, before the climate weighting factor is applied, a region in Arizona would be compared equally to an area in Florida. This Index is displayed in a graphical form in Figures 3a and 3b on page 8 . Figure 3a is from the last week in June, and shows that much of the mid-Atlantic region was experiencing a moderate to severe drought. Figure 3b, from July 31st, shows significant improvement in eastern and parts of central Virginia, but little or no improvement elsewhere.

The period of June 1998 to June 1999 was the second driest in the 103 year monitoring history and has produced heightened concerns from several state, local and federal agencies.

The Keetch-Byram Index monitors the amount of moisture in vegetation. It is a comparison of the current and recent weather conditions to the potential or expected fire behavior.

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Calling All Weather Fanatics!!

Do you know others who are fascinated by the weather? If so, tell them about the SKYWARN Program and invite them to attend a spotter training session.

Hellos and Good-byes

Personnel changes continue at WFO Wakefield. During the past few months, we have said goodbye to HMT Dallas Lundy, and hello to Met Intern Tim Armstrong. Dallas left us in late April for the sunny climate of Tallahassee FL. Dallas came to us from NWS Apalachicola, FL, so he is returning to familiar territory. This move also takes Dallas and his wife closer to their families. We wish Dallas the best of luck in his "new" surroundings.

Tim Armstrong came to us from NWS Jackson MS, where he started his NWS career. Tim hails from western North Carolina, so this is also a move that brings him closer to family and friends. Tim has already shown lots of ambition, and we expect him to have a very successful and productive tenure here in Wakefield.

A second Met Intern arrived in mid-July. Pat Maloit came to Wakefield in mid-July from PRC Corp., where he was an AWIPS Training instructor. Pat will bring both his military experience, and his AWIPS experience with him to Wakefield. We expect that he will be a great addition to our staff.

letter from The editor

We have completed our Spring Skywarn training sessions. So far this year, we successfully trained 250 people, many in areas where few spotters previously existed!!! However, we still have a number of counties with few, if any, spotters. Table 1 shows the distribution of spotters across our 66 counties and independent cities. If you know of someone who you think would be interested in the SKYWARN program, encourage them to attend a training session. We can never have enough "eyes on the skies". SKYWARN spotter training will resume this fall. If you would like to host a SKYWARN training session, call Bill Sammler at (757) 899-5732 x223 or send him e-mail at

william.sammler@noaa.gov.

I want to WELCOME all of our new spotters, and say thank you for volunteering to be a part of such a vital program to both the National Weather Service and your local area. If you are a new spotter, please refer to the *Good Reports vs. Bad Reports* article (Page 4) for a listing of weather phenomena to report as well as what to include in a report. Please follow these guidelines when relaying a report and always give

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County/Indp't City	*Number of*	*County/Indp't City*	*Number of*	*County/Indp't City*	*Number of*
Virginia		**Virginia Con't**		**Virginia Con't**	
Accomack	7	King and Queen	2	Suffolk	20
Amelia	4	King William	4	Surry	1
Brunswick	1	Lancaster	12	Sussex	3
Caroline	5	Louisa	10	Virginia Beach	65
Charles City	3	Lunenburg	5	Westmoreland	2
Chesapeake	36	Mathews	3	Williamsburg	7
Chesterfield	51	Mecklenburg	7	York	16
Colonial Heights	7	Middlesex	1	**Maryland**	
Cumberland	1	New Kent	3	Dorchester	3
Dinwiddie	12	Newport News	61	Somerset	4
Emporia (City)	1	Norfolk	20	Wicomico	21
Essex	1	Northampton	0	Worcester	4
Fluvanna	19	Northumberland	2	**North Carolina**	
Franklin (City)	7	Nottoway	13	Bertie	11
Gloucester	22	Petersburg (City)	6	Camden	3
Goochland	6	Poquoson (City)	4	Chowan	5
Greensville	0	Portsmouth (City)	12	Currituck	3
Hampton	19	Powhatan	5	Gates	9
Hanover	16	Prince Edward	4	Hertford	27
Henrico	25	Prince George	7	Northampton	17
Hopewell (City)	5	Richmond (City)	38	Pasquotank	8
Isle of Wright	14	Richmond County	0	Perquimans	6
James City	7	Southampton	18		

Table 1: Number of spotters within each county or independent city in Wakefield's area of responsibility.

Upcoming Spotter Training

September 11th 9am – Amelia Emergency Squad Building.

To host a session, please contact Bill Sammler by e-mail or by phone at (757) 899 - 5732.

*Spotter training information will be posted on our home page.

TELL US WHAT YOU THINK!!

Please give us input for future articles in the Spotter's Page. Now is the time to ask those unusual weather questions!! Also for those who visit our Web-page, let us know what information we can add to better serve you.

good Severe Weather reports Verses bad reports

With us now in the heart of severe weather season, it is very important that when you, as a spotter, see severe weather that you not only relay your observation in a timely manner; but you also pass along other vital information. At the NWS, we use your reports to not only prepare warnings and statements but to also verify the severe weather warnings and use for research purposes. Every aspect of the report is important. Thus if at all possible, please try to give a complete severe weather report.

When relaying a Severe Weather report to the NWS, you should include the following information:

1) Your **Spotter ID.**
2) **Where** is the event occurring/ occurred?
3) The **Time/Duration** of the event.
4) **What is** actually happening/ happened?

Examples of good and bad reports:

Good - " Hi, my name is Joe Smith, spotter ID is XXXXX , I am in Hebron which is in Wicomico County, MD. Golf Ball size hail is presently falling. "

Bad - " Hi,, my name is Ralph and a severe storm is occurring; it is hailing and lightning is flashing all around. (This person did not give a location or definite hail size. Also, even though frequent lightning is common during severe thunderstorms, it is not one of the warning criteria for a severe thunderstorm.)

Good - " Hi, this is Julie Armstrong, spotter ID is XXXXX. I am 5 miles west of Carlet in Essex County, VA on route 624. I do not have a time for the event. However, I just drove past 4 large trees down, and numerous branches were on the ground. Everything seems to be lying in one direction; so it looks to be straight line wind damage. (Even though this person did not have a time for the event, the description of the damage was extremely useful.)

Bad - " Hello, this is George and the winds are blowing very hard. (George did not give his location, spotter ID, damage descrpition, nor a specific estimate of how strong the winds were. They could have blowing at 25 mph , or above the 58 mph severe criteria.)

Hopefully, these examples have given you an idea as to the difference between a good and a bad report. For a specific list of hurricane conditions to report, refer to table 2, and for a list of severe weather conditions, refer to table 3. Please, always try to give as much information as possible. If you have any questions, feel free to contact either Bill or myself.

HURRICANE WEATHER CONDITIONS

1. Tornadoes
2. Damage – Coastal or Inland
- *** Structural damage – including roofs off houses and collapsed walls/buildings**
- *** Any trees down**
- *** Power lines down/amount of people without power**

3. Storm Surge and Coastal Flooding Information
- *** Water level height**
- *** Extend of flooding – water in buildings, streets flooded, road closures, etc.**
- *** If known, how far inland does the flooding extend**

4. Reports of Inland Flooding
- *** Roads Closed – specific names or route numbers**
- *** Bridges washed out**
- *** Water in buildings**
- *** Streams and rivers flowing out of banks**

5. Wind Reports – RELIABLE wind measurements ONLY!!!
6. Rainfall – This will vary depending upon how much rain fell in the past week.
- *** Typically, under dry conditions, begin reporting at 3 inches, then report every additional inch.**
- *** When conditions are wet, begin reporting at 2 inches, then report every additional inch.**

Table 2: Weather Conditions to report to the NWS during a Hurricane Event.

Reportable Severe Weather Events

1. Tornadoes– Location, movement, and damage; funnel clouds, wall clouds or waterspouts
2. Wind – 50 mph or stronger , wrist size or larger branches broken off trees, power lines down
3. Hail – ANY size
4. Flooding – Rivers or creeks near bankfull or out of banks, water over roads or any coastal flooding.
5. Rainfall – 1 inch or more in an hour.
6. Snow – 1 inch or more per hour; when snow depth is 4 inches or greater.

Table 3: List of Severe weather conditions to report to the NWS.

NOAA WEATHER RADIO 2000:
Who's That Alien?

NOAA Weather Radio (NWR) is commonly known as the "Voice of the National Weather Service". However, over the past few months, many people have called to ask about the "alien" voice broadcasting the weather over NOAA Weather Radio. This alien is the automated voice of NOAA Weather Radio 2000, commonly called CRS (Console Replacement System). CRS is a computer-based broadcasting console, installed at each National Weather Service office, that automatically translates and schedules written forecasts and warnings into synthesized voice broadcasts. The system is part of a multi-year improvement of the National Weather Service's NOAA Weather Radio network.

NOAA Weather Radio uses text-to-speech voice synthesis provided by the contractor DEC (Digital Equipment Corporation) through a program known as DECtalk, a system of voice boards and software. DECtalk is also commonly used by the hearing impaired and other physically challenged people. The acclaimed British physicist, Stephen Hawkins, uses DECtalk in his daily life. The automated voice technology used in DECtalk is considered the "top of the line" in the area of synthesized voices. The National Weather Service chose DECtalk over ***concatenation*** (most often used in recordings by banks, telephone companies, and other service businesses) because of the wide variety of information broadcast over NOAA Weather Radio. Using a pre-recorded human voice would have required taping thousands and thousands of words with different pronunciations and inflections to cover all the possible forecasts and warning situations, not to mention the many cities, towns, geographical names, and other specific terms that would be necessary.

The National Weather Service continues to work with the contractor, DEC, to improve the broadcast quality of NOAA Weather Radio 2000. There are multiple male and female voices available with the system but NWS has chosen to use the Standard Male or Deep Male voice as a standard until the quality can be further improved. WFO Wakefield is using the Standard Male voice with a rate of around 230 words per minute. Even though DECtalk will attempt to correctly pronounce any word, we can improve the pronunciation by using the word dictionary and pronunciation programs. We are presently using a combination of human and automated voice recordings from around 10 A.M. to midnight, and mostly automated recordings during the other hours when there is reduced staff. Currently, all warnings are done by a human voice. In the future though, we will gradually transition to mostly an automated voice. Automated broadcasts have the advantage of providing the listener with information faster. Severe weather watches, warnings, and other emergency information can be disseminated more quickly, and multiple events can be processed and broadcast quicker, thus reducing the time it normally takes to get the information out to the public.

With the rapid development of computer software and computing technologies, we expect to offer our listeners with continued improvements to the "Voice of the National Weather

Figure 2: Susan Funk, Hydrometeorological Technician, demonstrates how to make a "human" recording for the NOAA weather radio on the new CRS system

NOAA Weather Radio Frequencies

KHB37 - 162.55 MHz - Norfolk/Driver, VA
WXM57 - 162.40 MHz- Heathsville, VA
KEC92 - 162.475 MHz - Salisbury, MD
WXK65 - 162.475 MHz - Richmond, VA
WWG33 - 162.45 MHz - Margarettsville, NC

Kudos to spotters

In this column, I will highlight some of the most useful SKYWARN reports and appreciated spotter contributions. Without SKYWARN spotters, the process of warning and alerting the public to threatening weather would be more difficult. Spotters are a valuable asset to the NWS, your local counties, and cities. WFO Wakefield expresses our thanks for you willingness to be a part of this program. Numerous people have called in this severe weather season with valuable reports. Unfortunately, I will not be able to mention everyone in this article. But, vital information relayed during two April events deserves special mention. The first event occurred in during the evening hours of April 9th. First, a supercell thunderstorm developed in Central Maryland and tracked across the Maryland Eastern Shore, producing primarily large hail. In addition, a squall line developed in advance of an approaching cold front. The squall line affected the majority of Wakefield's area, over a 2-3 hour period. This line of storms produced widespread wind damage. A spotter in Henrico County, VA was one of the first people to call. Amateur Radio ID K4VRF reported winds of 55 to 60 mph at 720 p.m., at a location of 1 mile West of Short Pump. At 815 p.m. HAM spotter, KE4WBT, reported a roof blown off a building in Gloucester Court House in Gloucester county. Large hail was reported along the southern end of the storms in Lunenburg and Emporia regions. At 750 p.m., Robbie Jones, spotter ID OKA03, reported quarter size hail south of Victoria in Lunenburg County, VA. At 840 p.m., HAM spotter, KR4VQ, relayed a report of golfball size hail at mile marker 8 on I-95, near Emporia.

Severe weather also impacted the area in late April. On April 23rd, a squall line developed in the mid afternoon over the Appalachians, and intensified as it moved into the Virginia piedmont. These storms produced high winds and large hail in many areas of central and eastern Virginia ,as well as in sections of Maryland. At 610 p.m. William Sowers III, spotter ID MLF01, in Shannon Hill, Goochland County, VA reported 2 inch size hail. At 620 p.m., Nancy and Kenny Sutton, spotter ID LJN01, in Bumpass (Louisa county) reported trees down across a car. At 645 p.m., Bill Hark, spotter ID LKL10, reported quarter size hail at Broad Street in Richmond. Another report which was received later in the event was from Jack Wilson, spotter ID LML02, in Williamsburg at 827 p.m. He reported trees down but could not give an actual time of occurrence. Even though he did not have a time, the information of the damage was still extremely useful!

This is not an all inclusive list of individuals who have called in with weather reports. It is merely a sample of the excellent reports that your and your fellow spotters have

Local ARES Nets

Location	Time	Freq.	ARES EC
NIGHTLY – South Tidewater ARES Net			
	9 PM	146.97	WB4AXY
SUNDAY			
Franklin	9 PM	147.30	N4UPX/KB4ZII
MONDAY			
Goochland	8 PM	147.09	N4TZE
Hanover	930 PM	145.43	KS4LB
DELMARVA	9 PM	146.82	(general radio net)
York/ Poquoson	8 PM	146.94	Area EC
North Carolina - Tarheel Emergency Net			
	730 PM	145.11	varies
TUESDAY			
New Kent	730 PM	146.715	(inactive)
Newport News	8 PM	147.165	Area EC
Richmond	8 PM	145.11	N4WFR
Chesterfield	9 PM	147.36	KD4GAU
WEDNESDAY			
Williamsburg/ James City	730 PM	146.76	KC4CMR
Hopewell/PG	8 PM	146.94	KD4ACG
ARES EC/AEC	9 PM	146.94	1st Wed of Month
Regional - Tidewater/ eastern North Carolina			
9 PM – EC varies		145.11/145.41/ 146.94 147.30/147.12/ 146.91	
THURSDAY			
Gloucester/ Middle Peninsula	8pm	145.37	
Hampton	730 PM	145.49	KF4POC
Henrico	830 PM	147.51S	KF4WP
Newport News	730 PM	145.49	Area EC
Rappahannock	930 PM	147.015	N/A
Smithfield	730 PM	147.195	KC4WCH
MISCELLANEOUS			
Newsline/Rain			
Sat/Sun	7 PM	145.41	
Mon/Wed	8 PM	145.41	

*Note: "S" beside the frequency denotes simplex

Continued Hurricane Safety

(Continued from page 1)

should include the following items: a first aid kit , equipped with any essential prescribed and over the counter medications; non-perishable food and a can opener; bottled water (recommend at least 3 gallons per person per day); a battery powered radio, flashlight and EXTRA BATTERIES; essential items for infants, elderly or disabled family members; and written instructions of how to turn off gas and water if necessary.

When a hurricane watch is issued: 1) listen to the NOAA weather radio or the local media for updated storm information; 2) Bring indoors - lawn furniture, outdoor decorations, trash cans, hanging plants or any other loose articles; 3) Prepare to cover windows with shutters or precut plywood; 4) Gas up the car; 5) Recheck manufactured home tie-downs; and 6) Make sure the supplies kit is complete.

When a Warning is issued, listen to the advice of the local officials to determine your course of action. If you are evacuated, complete any last minute preparation activities, then leave as soon as possible. If you do not evacuate, secure your home and property, and remain inside. away from windows. A centralized room is the best location. Also, if the hurricane eye is expected to pass over or near your area, be aware that when it does pass over you, the hurricane threat is NOT over. Once the eye passes your area, the winds will quickly strengthen, and shift direction. This second round of wind can completely destroy trees and buildings that were damaged by the first round of winds. Lastly, always be cautious of rising or flooding water.

Once the hurricane is over, continue to listen to the NOAA weather radio, or local media for further instructions. If you evacuated, return home ONLY when local officials allow re-entry. Inspect for damage, and always use flashlights in the dark. If gas lines were damaged, a burning object could cause an explosion. Finally, always be cautions of live wires, especially in standing water. An electric shock can pass through water even if the wire is several feet away.

Hopefully, no hurricanes will impact the mid-Atlantic region this year. However, in the event we are affected, it is better to be prepared than unprepared.

Names for the 1999 Atlantic Ocean and Gulf of Mexico Tropical Storms

Arlene	Gert	Maria	Tammy
Bret	Harvey	Nate	Vince
Cindy	Irene	Opheli	Wilma
Dennis	Jose	Phillippe	
Emily	Katrina	Rita	
Floyd	Lenny	Stan	

SAFFIR-SIMPSON HURRICANE SCALE

Scale Number (Cat)	Sustained Winds (MPH)	Damage	Examples (States Affected)
1	74 – 95	Minimal	Florence 1988 (LA) Charley 1988 (NC)
2	96 – 110	Moderate	Kate 1985 (FL Panhandle) Bob 1991 (RI)
3	111 – 130	Extensive	Alicia 1983 (N TX) Emily 1993 (NC Outer Banks)
4	131 – 155	Extreme	Andrew 1992 (S FL) Hugo 1989 (SC)
5	>155	Catastrophic	Camille 1969 (LA / MS) Labor Day Hurricane 1935 (FL Keys)

Have you Moved?

If you have changed your address, will be moving soon, or no longer wish to receive *The Spotter's Page*, please call (757) 899-5732 ext. 223 and let us know. Spotters, you can still participate in the SKYWARN program at your new address. If your new residence is no longer in our area, we will contact the office serving your new local and let them know that you are available to help!

Continued Drought: How dry do we need to be?

(Continued from page 2)

Thus, it is regularly used by fire suppression experts, as well as those interested in the current drought situation. Lower values indicate moist vegetation levels, whereas values between 600 and 800 indicate severe drought conditions. Figure 4 is the Keetch–Bryam Index from early July. The graph shows much of the region to be in the 100 to 200 range, which indicates moderate fire danger (i.e., grasses and smaller plants have lower moisture levels while bushes and trees have normal moisture levels). You can see from Figures 3 and 4 that much of our area was experiencing extreme to moderate drought conditions. During the first part of July, average precipitation departures from normal were between 2 and 7 inches below normal in Virginia, and 1 to 5 inches below normal in the Maryland Eastern Shore . Even if normal rainfall fell across the area through the fall months, soil moisture deficits would still not recover to normal conditions.

Recent rains have alleviated the drought conditions in portions of central and eastern Virginia. However, severe to extreme drought conditions persist from Maryland into much of northern and western Virginia.

With conditions so dry, how can you as the garden enthusiast , cope with the drought situation. The following are some tips which were highlighted on the website http://www.whitneyfarms.com/garden/geninfo/watering.main.html#step1. They suggest to first evaluate your soil. If you have sandy soils, add compost and peat moss to help the soil retain moisture. Those with heavy clay soils should add materials like bark and wood chips to help break apart the soil and allow water to penetrate to the roots more easily. Another tip is to use soaker hoses or drip irrigation whenever possible. If those are not a possibility then, use the following tips when sprinkling: 1) adjust the flow to a misting level, 2) water either early in the morning or at night to decrease the amount of water evaporation, 3) water lawns separately from plants with different watering needs, and 4) refrain from water during windy conditions as this will also increase the effects of evaporation. With continued dry weather expected in next few months, hopefully, these tips will help you to cope with the drought.

By Keith Lynch, Service Hydrologist

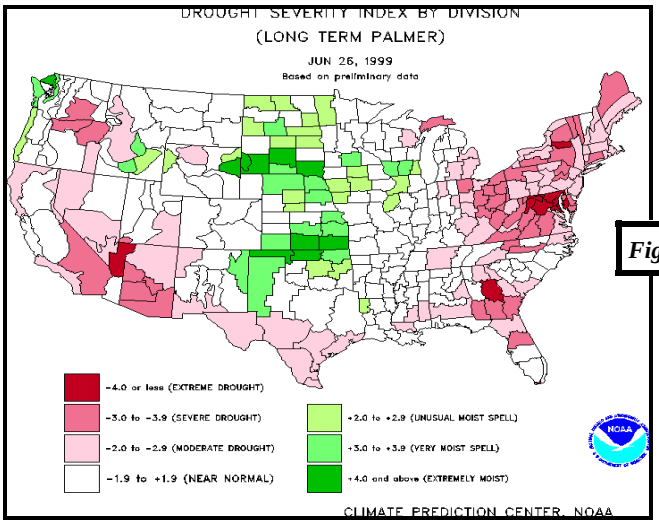

Figure 3a

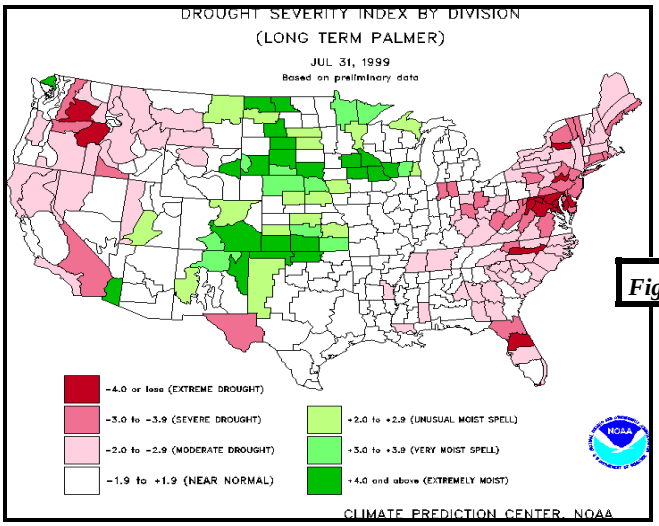

Figure 3b

Figures 3a & 3b: Maps of the Palmer Index for the last week in June and the last week in July. These images were found at: http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/regional_monitoring/palmer.gif

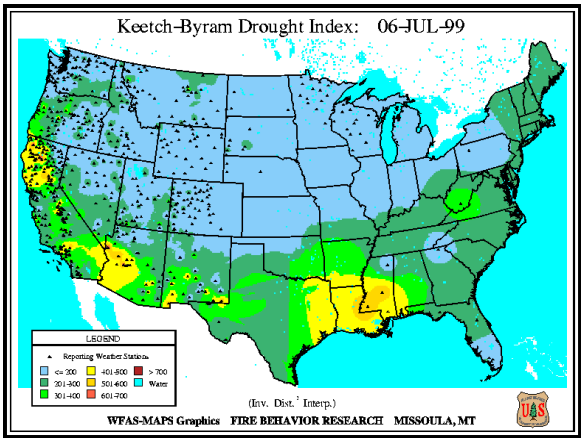

Figure 4: A graphical display of the Keetch-Byram Drought Index for the first week in July. This image was found at: http://www.fs.fed.us/land/wfas/kbdi.

Would You like a Color Version of the Spotter's Page?

If you have access to the internet, you can download a color version of The Spotter's Page to your computer. If you wish to receive advance notice of the electronic newsletter version, please send your e-mail address to Bill Sammler. We will then place you on our e-mail notification list.

To obtain a color version of The Spotter's Page, connect to the NWS Wakefield Home Page at www.nws.noaa.gov/er/akq. The document is in PDF format, which can be viewed and printed using Adobe Acrobat Reader**7**. Adobe Acrobat Reader is available free of charge from the Adobe**7** Web site (www.adobe.com).

Spotter Information Update

Below is a questionnaire form which we are requesting that you complete it you have moved in the past year or if you believe that any of the information on the questionnaire has changed. Please send the completed questionnaires to The National Weather Service, 10009 General Mahone Hwy., Wakefield VA 23888-2742 Attn: Diane Shade. If you have any questions, please feel free to contact either Bill Sammler or Diane Shade.

SPOTTER UPDATE QUESTIONNAIRE

NAME(S) _____ SPOTTER ID _____

E-MAIL ADDRESS _____ AMATEUR RADIO
INTERNET ACCESS? YES/NO CALL SIGN _____

MAILING ADDRESS_____

CITY _____ STATE _____ ZIP CODE _____
(Use 9 digit zip code, if known)

STREET ADDRESS _____
(If different than above address)

COUNTY _____ LAT/LON _____

If LAT/LON is unknown, please give a brief description as to where your residence is within the county.
Direction and Distance to US/State and County Routes _____
_____

HOME PHONE NUMBER (_____)_____-_____

MAY WE CALL YOU AT HOME? YES/NO If Yes, When (Anytime/ ____ AM to _____ PM)

Will you be spotting from : Home (Yes/No) Work (Yes/No)

Do you have any weather equipment? Rain Gage (Yes/No) Anemometer (Yes/No)
Thermometer (Yes/No)

Date which you last attended a spotter training session? _____

CONT. AWIPS

(Continued from page 1)
winds, etc. using AWIPS.

Finally, emergency managers, SKYWARN spotters, and other important users may be able to access some of the AWIPS database through a computer called LDAD (Local Data Acquisition and Dissemination). LDAD will also allow external users to provide the NWS with data from various sources, including SKYWARN severe weather reports. The processes by which external users will access AWIPS, and what data they will have access to, have yet to be determined. We'll let you know when these capabilities become operational.

Wakefield's Webpage: www.nws.noaa.gov/er/akq
E-mail: william.sammler@noaa.gov or
diane. shade@noaa.gov

Important Phone Numbers:
Severe weather line: 1-800-737-8624 (Severe Weather Only)
Public phone line: (757) 899-4200
FAX : (757) 899-3605/5107 (Operations area)

Con't Letter from Editor

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your Spotter ID. If you cannot remember your ID number simply give your name. We use this information to not only further pinpoint your location but to also give you credit in the "Kudos" section of the newsletter. One key note though for members of the Amateur Radio organization, do not give your Spotter ID when relaying information via the radio. Please continue to use your Amateur Radio number as your ID. Also if you have any questions, feel free to contact either Bill Sammler or myself. ***I would also like to remind everyone that the toll free severe weather line is strictly for severe weather reports.*** If you need general weather information, please use the public line which is (757) 899-4200.

Lastly, for those who have access to the internet, I encourage you to peruse the severe weather section of our website.

NATIONAL WEATHER SERVICE
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